data

HEWLETT PACKARD

HP | Vectra VEi7/VEi8 | Corporate PCs

Manageable, stable, secure corporate PCs

Technical Datasheet

HP Vectra PCs

If you are looking for a top-performing corporate PC that's also easy to manage, the HP Vectra PC is the right choice for you. These award-winning desktop PCs lead the industry in making corporate IT environments highly manageable, stable, and secure.

Manageable

- *Know how many PCs you have and where*
  With HP TopTools, HP's award-winning Web-based desktop management software you can automatically inventory, search, or group your PCs using hundreds of specific attributes.
- *Reduce downtime*
  Tool-free cases coupled with easy-to-service chassis make upgrades and routine maintenance on your HP Vectra PCs a breeze

Stable

- *Configure and deploy PCs faster*
  With HP Vectra PCs, you benefit from minimized component and driver changes throughout the product model lifecycle. With consistent components, you can set up a thousand PCs in a fraction of the time it used to take.
- *Simplify support*
  With a few consistent, long-lasting HP Vectra PC configurations throughout your company, you'll have a more streamlined operating environment.
- *Minimize re-qualification and gold disk maintenance*
  Spending too much time managing the details of each new PC model? Long product lifecycles and consistent components in each HP Vectra PC mean less time re-qualifying desktops and updating your software image.

Secure

- *Protect your company's data*
  Did you know the greatest risk to your company's data actually comes from *within* the firewall? That's why we designed security right into our HP Vectra PCs. Features such as smart card support, dual-level passwording, and remote component locking mean that you can simply and securely control access to PCs and keep your data exactly where it belongs.
- *Prevent hardware theft*
  HP's unique Master Pass Key feature puts you in control with a single, custom-configurable key to access all your HP Vectra PCs.

HP Vectra VEi7 and VEi8 PCs

- *Value-priced performance*
  If you are looking for an aggressively priced, stable, standard corporate PC with all the latest industry-standard technologies, read on—and take a long look at the all-new HP Vectra VEi7 and VEi8 PCs.

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AT A GLANCE

PCs that deliver

- Choice of processing power:
  - Intel® Pentium® III 550 MHz, 600E MHz, 650 MHz, 700 MHz, or 750 MHz processor with 256 KB full-speed or 512 KB half-speed. Level-2 cache internal to processor.
  - Intel Celeron™ 500 MHz, 533 MHz, or 566 MHz processor with 128 KB Level-2 cache internal to processor.
- 64 MB or 128 MB SDRAM, expandable to 512 MB (To achieve the maximum memory configuration, original DIMM modules may need to be replaced. HP recommends and supports only HP-supplied memory upgrade modules).
- Up to 13.5 GB Ultra ATA/33 hard disk storage.
- Choice of integrated graphics solutions for outstanding 2D and3D performance and visual quality:
  - Matrox MGA G200 AGP 2X 3D with 8 MB video memory.
  - SiS Super AGPset with 4 MB video memory, upgradable to 8 MB.
- LAN models with industry-leading 3Com Ethernet card.
- Multimedia models with 32X Max-speed or 48X Max-speed.
- 16-bit, integrated PCI sound on all models.
- Ease of management with HP TopTools and 3Com's industry-standard desktop management solutions.
- Windows® 95, Windows® 98 (first edition), Windows NT® Workstation 4.0 preloaded, or Windows® 2000 Professional.

PC SYSTEM FEATURES

Package	• Optimized, desk-space-saving desktop package (four shelves, four slots). • HP Windows® 95 Keyboard with EuroKey (Available in selected countries; please check with your reseller for availability). • HP Two-Button Mouse on all models.
Processor	• Choice of processors: — Intel® Pentium® III 500 MHz, 600E MHz, 650 MHz, 700 MHz, 750 MHz—offers improved architecture (memory streaming and floating point) and incorporates 70 new instructions called Single Instruction Multiple Data (SIMD). — Intel Celeron™ 500 MHz, 533 MHz, 566 MHz processor. — MMX™ technology support.
Chipset	• Intel's BX-class 440ZX AGPset on Intel Pentium III processor models: — Based on Intel 440BX AGPset core architecture. — 100MHz system bus. • SiS 620 AGPset on Intel Celeron processor models: — 66 MHz or 100 MHz system bus. • Includes Advanced Configuration and Power Interface (ACPI).
Cache	• Intel Pentium III processor models: — 32 KB Level 1 internal to processor. — 256 KB full-speed or 512 KB half-speed Level-2 internal to processor • Intel Celeron processor models: — 32 KB Level 1 internal to processor. — 128 KB Level 2 internal to processor.
Memory	• 64 MB or 128 MB100 MHz (6ns) SDRAM (non-ECC) standard (PC 100 specification): — Expandable to 512 MB through two DIMM sockets. — Support for ECC memory operating in non-ECC mode. — Autodetection of memory modules via serial presence detect (SPD). • Upgrade path:

Base memory	**32 MB**	**64 MB**
— With 32 MB upgrade module added	64 MB	96 MB
— With 64 MB upgrade module added	96 MB	128 MB
— With 128 MB upgrade module added	160 MB	192 MB
— With 256 MB upgrade module added	288 MB	320 MB
— With original base module removed and two 256 MB upgrade modules added	512 MB	512 MB

Hard disk drive	• 4.3 GB, 6.4 GB, 8.4 GB, 10 GB (5400rpm) or 13.5 GB (7200rpm) Ultra ATA/33 hard disk drive: — SMART II (self-monitoring analysis and reporting technology). — 33 MB/s transfer rate.
Hard disk controller	• PCI Bus Master Ultra ATA controller: — Support for Ultra ATA/66, PIO (up to Mode 4), DMA Mode 2, and Ultra DMA Mode 2. — Up to three Fast-IDE devices supported on desktop and minitower models, including one hard disk drive and two optical storage devices (CD-ROM drive, DVD-ROM drive, etc.).
Mass storage shelves	• Four shelves: — One front-accessible with standard, third-height, 3.5-inch floppy disk drive preinstalled. — Two front-accessible for standard, half-height, 5.25-inch devices (CD-ROM drive preinstalled in one shelf on selected models). — One internal with standard, third-height, 3.5-inch hard disk drive preinstalled.

PC SYSTEM FEATURES

Floppy disk drive	Third-height, 3.5-inch, 1.44 MB floppy disk drive preinstalled
Optical storage	• HP 32X or 48X Max-speed multi-read IDE CD-ROM drive (Available on selected models only).
Total free expansion slots (LAN adapter preinstalled in one PCI slot on selected models).	• Four slots: — Three PCI. — One ISA. *Note:* PCI and ISA cards supported up to short-length card size
Audio subsystem	• 16-bit stereo PCI audio recording and playback. • Full duplex audio. • DirectX 5.0 (Windows® 95 only). • Headset included on CD-ROM models. • Audio drivers, including: Windows NT® Workstation 4.0, Windows NT® 3.51, Windows® 98, Windows® 95, Windows® for Workgroups3.11, and OS/2 Warp 4.0, are available from the HP Desktop PC Support Web site http://www.hp.com/go/vectrasupport
Built-in I/O	• One 25-pin parallel port (ECP/EPP bidirectional Centronics supporting IEEE 1284). • Two 9-pin serial ports (16550 UART). • Two PS/2 connectors for keyboard and mouse (Mini-DIN). • Two stacked Universal Serial Bus (USB) ports for easy reconfiguration, attachment, and hot swapping of external peripherals. • One 15-pin VGA connector. • Audio ports (stereo in, stereo out, microphone in) on all models. • One RJ-45 Ethernet port on all LAN models (10/100 Base-T).
Upgradability	• BIOS in flash EEPROM for convenient BIOS upgrades. • Memory upgradable using SDRAM 100 MHz (6ns) non-ECC DIMMs. • Hard disk storage upgradable up to 10.1 GB on Pentium® III models.

GRAPHICS SUBSYSTEM

Video graphics	**Graphics subsystem—Pentium® III Processor Models** Matrox MGA G200 AGP 2X integrated graphics processor with video accelerator on AGP bus: • Outstanding 2D and Direct 3D performance and visual quality. • Supports DDC2b support for Plug-&-Play detection of monitor. • Supports use of multiple monitors under Windows® 98 (with additional PCI graphic card). • Support for accelerated 3D graphics. • 250MHz RAMDAC for flicker-free displays. **Graphics subsystem—Celeron™ Processor Models** SiS 620 Super AGPset graphics integrated chipset: • Outstanding 2D and Direct 3D performance and visual quality. • Supports DDC2b support for Plug-&-Play detection of monitor. • Supports use of multiple monitors under Windows 98 (with additional PCI graphic card). • 230MHz RAMDAC for flicker-free displays.
Memory	**Matrox MGA G200 AGP 2X Graphics Card** • 8 MB SDRAM. **SiS 620 Super AGPset Graphics Card** • 4 MB SGRAM, upgradable to 8 MB.
Available graphics drivers	• Windows NT® Workstation 4.0, Windows NT® Workstation 3.51, Windows® 98, Windows® 95, Windows® for Workgroups 3.11 and OS/2 (Warp 4.0) • Drivers may be preloaded or available from the HP Desktop PC Support Web site at: http://www.hp.com/go/vectrasupport

Maximum resolutions

HP Ergonomic Modes support these non-interlaced resolutions for Windows NT 4.0, Windows 98, and Windows 95.

Matrox MGA G200 AGP 2X Graphics System

Resolution	256 colors (8-bit)	64K colors (16-bit)	16.7M colors (24-bit)	16.7M colors (32-bit)
640 x 480	60-85 Hz	60-85 Hz	60-85 Hz	60-85 Hz
800 x 600	56-85 Hz	56-85 Hz	60-85 Hz	60-85 Hz
1024 x 768	60-85 Hz	60-85 Hz	60-85 Hz	60-85 Hz
1152 x 864 (Windows NT only)	60-85 Hz	60-85 Hz	60-85 Hz	60-85 Hz
1280 x 1024	60-85 Hz	60-85 Hz	60-85 Hz	60 Hz
1600 x 1200	60-85 Hz	60-85 Hz	—	—

SiS 620 Super AGPset Graphics System

Resolution	256 colors (8-bit)	64K colors (16-bit)	16.7M colors (24-bit)
640 x 480	60-85 Hz	60-85 Hz	60-85 Hz
800 x 600	56-85 Hz	56-85 Hz	60-85 Hz
1024 x 768	60-85 Hz	60-85 Hz	60-85 Hz
1280 x 1024	60-85 Hz	60-85 Hz	—
1600 x 1200	60-85 Hz	—	—

SOFTWARE

Operating System[1]	• HP-supported operating systems: Windows NT® Workstation 4.0, Windows® 2000 Professional, Windows NT® Workstation 3.51, Windows® 98 (first edition), Windows® 95, Windows® for Workgroups 3.11, OS/2 (Warp 4.0), DOS 6.22.
Provided software	• Operating system: Windows NT® Workstation 4.0, Windows® 2000 Professional, Windows® 98 (first edition), or Windows® 95 depending on model. • Online documentation on support, performance benefits, product features, and use of PC. • Microsoft Internet Explorer. • HP TopTools device management software. • HP DiagTools hardware diagnostic software. • McAfee VirusScan with DMI alerting. • 3Com 3.8 LAN driver. • HP Soft Power Down for Windows NT. • Microsoft Word 2000 (on selected models). • HP LAN Card Ready drivers available from HP Desktop PC Support Web site (http://www.hp.com/go/vectrasupport)

[1] HP Image Creation and Recovery CD, including recovery copy of preloaded operating system as well as hardware diagnostic software, is shipped in the box with the HP Vectra PC in the following locations: North America, Western Europe, and most Asia Pacific countries (Taiwan, Thailand, and Korea excluded)

COMMUNICATION FEATURES

Ethernet LAN interface	• 3Com Fast EtherLink XL 10/100Base-TX 3C905B LAN interface. • Wake on LAN support. • Low CPU usage releases resources for local user tasks (DMA).
Preconfigured networking	• Ultra-fast installation.
Remote booting	• 3Com Managed PC Boot Agent—multiprotocol firmware to enable pre-boot capabilities in a networked environment (optional boot ROM for 3COM LAN models only—3COM accessory): — Enables remote automated installation and pre-OS desktop management. — Supports multiple protocols (DHCP, BootP, PXE, NCP/IPX, and RPL). — Compliant with today's industry standards: Wired for Management (WfM) 1.1a (upgradable to WfM 2.0) and PC 98.
Network administration guide	• Information on remote booting and network setup in all supported environments available on Web (http://www.hp.com/go/vectrasupport)
Network client ready	• Can run as a client PC in Microsoft, Novell, and IBM OS/2 network operating system environments.
Internet ready	• Microsoft Internet Explorer.
Available LAN drivers	• Novell NetWare 3.x/4.x clients; Windows NT® Workstation 4.0, Windows NT® 3.51, Windows® 98, Windows® 95, and Windows® for Workgroups 3.11 clients; IBM OS/2 Warp Connect, DOS 6.22. • Latest LAN information and drivers available from HP Desktop PC Support Web site (http://www.hp.com/go/vectrasupport)
LAN Card Ready program	• Tested with leading Ethernet and Token Ring adapters program. • Wake on LAN for selected third-party LAN cards in some operating-system environments. • Detailed setup instructions and HP-tested drivers for a wide range of LAN cards from 3Com, Intel®, IBM, Madge, D-Link, and Olicom available on Web (http://www.hp.com/go/vectrasupport)

MANAGEABILITY

Inventory management	**Remote and central inventory** • Auto-discovery of devices. • Automated collection of inventory (attributes depend on the PC's DMI implementation). • PC search and selection. • Reports (including asset location, configuration). • Access to detailed configuration information.
Configuration management	**Remote boot control** • System power-on. **Remote and central system software updates** • Hardware diagnostic software updates (HP DiagTools).
Fault management	**Local fault diagnostics** • Hardware diagnostics (HP DiagTools). • Smart card and smart card reader diagnostics. • LAN card diagnostics (3COM card only). **Remote and local alert reporting** • 16- and 32-bit application crash protection. • Hard disk drive capacity monitoring. • Memory usage monitoring. • Hard disk drive fragmentation control (Windows® 95/98). • IDE hard disk drive SMART failure warning. • Virus detection. **Remote access to status information** • Memory error. • Network interface status and activity. • Network interface statistics. • Services. • Current processes. • Device drivers. • Memory utilization. • Logical drives utilization.
Security Management	**Remote and central security management** • System SNMP community password change (SNMP services must be installed). • Report of PCs not password-protected. **Smart card management** • Inventory of smart card readers. • Local diagnostic of smart card and reader.

MANAGEABILITY

Compliance with industry standards	**Desktop Management Interface (DMI)** HP PCs have the most comprehensive DMI implementation in the industry: • DMI 2.0 compliant. • Allows access to over 600 PC attributes, providing detailed information on HP PCs and their components. • Full implementation of the DMI PC System Groups. • DMI-instrumented drivers for video, IDE, SCSI, and LAN cards. • DMI-instrumented BIOS. • Implementation of DMI monitor and LAN interface card groups. • Support for all DMI applications, including Intel® LANDesk, McAfee ZAC (Zero Administration Client), IBM's TME10, and more. HP TopTools is DMI compliant: • Can read DMI information from HP and non-HP DMI-compliant PCs. • Can manage DMI 2.0 and DMI 1.1 locally and remotely. • Report standard DMI alerts from HP and non-HP DMI-compliant PCs. **Wired for Management (WfM)** HP PCs are WfM 1.1 compliant and WfM 2.0 ready: • Conform with DMI 2.0 standard groups. HP TopTools is WfM compliant: • Ability to remotely turn on HP and non-HP PCs. **Simple Network Management Protocol (SNMP)** HP TopTools is SNMP compliant: • Ability to manage all SNMP devices (e.g., PCs, hubs, switches). • SNMP alert reporting.
Integration with third-party software management applications	• Integration with CA Unicenter TNG. • Integration with Microsoft SMS. • Integration of HP TopTools into other management applications to provide a complete management solution.

ERGONOMICS

Ergonomic and environmental design	• Video modes supporting non-interlaced resolutions up to 1600 × 1200 at ergonomic refresh rates up to 85 Hz. • EPA ENERGY STAR® certified (Windows® 95 and Windows® 98 operating-system models only). • Blue Angel certified (LAN models only). • Large selection of MPRII- and EPA ENERGY STAR–certified displays. • CFC-free manufacturing process; single plastic for easy recycling. • HP Soft Power Down. • Optimized desk-space–saving desktop package. • Energy-saving variable-speed fan for temperature control. • Control panel keeps user aware of PC status: — On/Off switch integrated in the surface to avoid accidental power-off. — On/Off green LED (orange in sleep mode).

SERVICE AND SUPPORT

Warranty	• Three-year international limited hardware warranty (first year next-business-day onsite, second and third year parts exchange).
Support	**Industrial-leading technical support program:** • One year free phone support from HP's customer support center for questions covering PC setup and configuration, operating system installation and configuration, and hardware diagnosis. • Product and technical support information and latest LAN information and drivers available from the HP Desktop PC Support Web site http://www.hp.com/go/support

SPECIFICATIONS

Physical Characteristics

- System dimensions (without keyboard): 16.5 inches wide x 14.8 inches deep x 5.5 inches high (41.8 cm x 14.8 cm x 14.0 cm).
- System weight (without keyboard) 19lb (8.7 kg).
- Keyboard dimensions: 18.3 inches wide x 7.0 inches deep x 1.3 inches high (2.0 inches standing) (46.4 cm x 17.8 cm x 3.3 cm [5.1 cm]).

Acoustic Emission

Sound Level (LxA) (typical)

- Sound level (LwA): <39dBA (typical).

Environmental Conditions

- Operating Temperature: 41 to 95° F (5° to 35° C).
- NonOperating Temperature: –40° to 158° F (–40° to 70° C).
- Operating Humidity: 15% to 80% RH.
- Non-operating Humidity: 5% to 85% RH (non-condensing) at 104° F (40° C).

Electrical Characteristics

Input Voltage

- Power supply (switch-selectable world-wide): 100-127 Vac/200-240 Vac.
- Input voltage: 50Hz/60Hz.

Power Consumption

- 36W (typical).
- 57 W (maximum).
- 23 W (standby—Windows® 95 and Windows® 98 only).
- 3 W (off)

Power Supply

- 90 W (continuous).

Regulatory Compliance and Approvals

Electromagnetic Compatibility

- FCC Class B (USA).
- ICES-003/NMB-003 Class B (Canada).
- EMC Directive 89/336/EEC amended by Directive 93/68/EEC (European Economic Area).
- CISPR 22: 1993 Class B (International).
- VCCI Class B (Japan).
- AS/NZS3548 (Australia-New Zealand).

Safety Approvals

- UL 1950 listed (USA).
- CSA C22.2 No. 950-M89 (Canada).
- NOM-019-SCFI-1993 (Mexico).
- TÜV-GS Mark (Germany).
- IEC 60950: 1991 +A1 +A2 +A3 +A4 (International).
- EN 60950: 1992 +A1 +A2 +A3 (European countries).
- Low Voltage Directive 73/23/EEC (European Economic Area).
- PSB (Singapore).

Datacomm Compliance

- BZT (Germany).
- DATEL (Sweden).

Ergonomics

- ZH1/618 Compliance (Germany).
- ENERGY STAR® Certification (USA).
- Blue Angel Certification (European Countries).

Designed for Microsoft® Windows®2000 Professional Windows NT® Workstation 4.0

Designed for Microsoft® Windows NT® Windows®95

Designed for Microsoft® Windows®98

intel inside pentium® III

intel inside celeron™

3Com CONNECTED

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All certifications may not be completed at product introduction. Please check with your HP reseller for certification status.

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